

Application No.: 10/563,084

2

Docket No.: 64726(45710)

Reception of Optical Signal" and should be changed to reflect such change prior to issuance of the patent.

This is the title as originally filed in the priority PCT document, PCT EP04/07155 filed herein pursuant to 35 U.S.C. § 371, the cover page of which is attached hereto. Accordingly, this corrects a defect originally in the filing receipt, not the fault of Applicant, and is not new matter.

Applicants believe that no fee is due. However, the Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith) or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 04-1105, under Order No. 64726(45710).

Dated: April 19, 2010

Respectfully submitted,

By 

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(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

CORRECTED VERSION

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
3 February 2005 (03.02.2005)

PCT

(10) International Publication Number
WO 2005/011220 A1

(51) International Patent Classification⁷: H04L 25/03
(21) International Application Number: PCT/EP2004/007155
(22) International Filing Date: 1 July 2004 (01.07.2004)
(25) Filing Language: English
(26) Publication Language: English
(30) Priority Data: 03015024.7 2 July 2003 (02.07.2003) EP

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NL, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

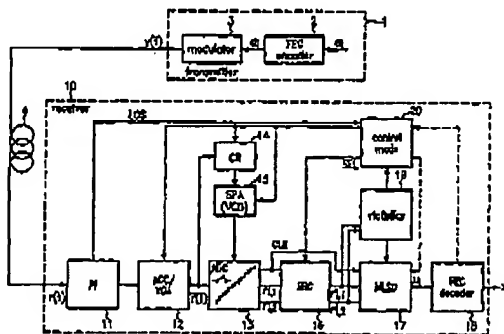
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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[Continued on next page]

(54) Title: CHANNEL ESTIMATION AND SEQUENCE ESTIMATION FOR THE RECEPTION OF OPTICAL SIGNAL



(57) Abstract: The application relates to channel estimation. The method comprises digitizing an analogue signal representing a sequence of symbols thereby associating one digital word with the level of said analogue signal at each sampling time. The most likely sequence of symbols is detected. To this end branch metrics are provided. According to one embodiment, a symbol period comprises at least two sampling times. Moreover the branch metrics are obtained from frequencies of digital words resulting from a digitizing and the symbols of the most likely sequence. According to another embodiment a symbol period comprises at least one sampling time. Events are counted wherein each event is defined by a channel state and a current digital word. Each channel state is defined by a pattern of symbols relative to a current symbol determined at the time of a current digital word. A model distribution is fitted to event counts and a branch metrics is obtained from the fitted model distribution. Moreover the invention relates to corresponding symbol detectors for optical receivers.

WO 2005/011220 A1

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SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

- as to the identity of the inventor (Rule 4.17(i)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE,

LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

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CHANNEL ESTIMATION AND SEQUENCE ESTIMATION FOR THE RECEPTION OF OPTICAL SIGNAL

Patent number: WO2005011220
Publication date: 2005-02-03
Inventor: LANGENBACH STEFAN (DE); STOJANOVIC
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NEBOJSA (DE); COREOPTICS INC (US)
Classification:
- international: (IPC1-7): H04L25/03
- european: H04L25/03B7A3
Application number: WO2004EP07155 20040701
Priority number(s): EP20030015024 20030702

Also published as:

EP1494413 (A1)
WO2005011220 (A1)

Cited documents:

EP1139619
US5313495
US5263053
XP010546449

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Abstract of WO2005011220

The application relates to channel estimation. The method comprises digitizing an analogue signal representing a sequence of symbols thereby associating one digital word with the level of said analogue signal at each sampling time. The most likely sequence of symbols is detected. To this end branch metrics are provided. According to one embodiment, a symbol period comprises at least two sampling times. Moreover the branch metrics are obtained from frequencies of digital words resulting from a digitizing and the symbols of the most likely sequence. According to another embodiment a symbol period comprises at least one sampling time. Events are counted wherein each event is defined by a channel state and a current digital word. Each channel state is defined by a pattern of symbols relative to a current symbol determined at the time of a current digital word. A model distribution is fitted to event counts and a branch metrics is obtained from the fitted model distribution. Moreover the invention relates to corresponding symbol detectors for optical receivers.

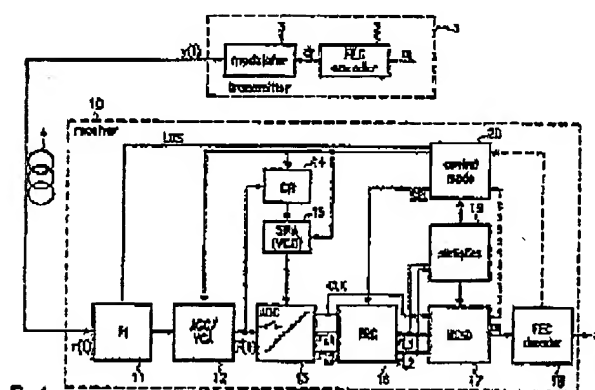


Fig.1

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